

**REMARKS**

Upon entry of the present Amendment, Claims 1-3 and 5-10 will be all the claims pending in the application. Claims 1 and 5-6 have been amended. Claim 4 has been canceled without prejudice.

Claim 1 has been amended to incorporate the subject matter of canceled Claim 4. Claim 1 has been amended to recite that wherein the lactic acid bacterium is present at a viable count of  $10^7$  cfu/g or more when preserved at a temperature of 10°C or less for 6 months. Support for the amendment to Claim 1 can also be found in the specification, for example, at page 9, second paragraph.

Claims 5-6 have been amended to render them consistent with amended Claim 1 and canceled Claim 4.

No new matter has been added. Entry of the Amendment is respectfully requested.

**I. RESPONSE TO CLAIM REJECTION UNDER 35 U.S.C. § 103 (a)**

Claims 1-3 and 5-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kimura et al. (EP 1 112 692 A1; "Kimura") in view of Mäyrä-Mäkinen et al. (US 5908646; "Mäyrä-Mäkinen").

Kimura is mainly relied upon for disclosing the use of *Lactobacillus gasseri*, with a disinfection property against *Helicobacter pylori*, in foods. [001]. The Examiner acknowledges that Kimura is silent regarding the use of *Lactobacillus gasseri* in cheese.

Mäyrä-Mäkinen is then relied upon for disclosing the incorporation of *lactobacilli*, for their antagonistic properties into cheese. The Examiner asserts that Mäyrä-Mäkinen discloses an anticlostridial *Lactobacillus rhamnosus*, which can be used to prevent problems caused by

clostridia in a number of different fields. Col. 5, lines 39-42. The Examiner asserts that Mäyrä-Mäkinen mentions the possibility to employ strains of *Lactobacillus rhamnosus* for medical purposes. Col. 5, lines 47-48. The Examiner also asserts that Mäyrä-Mäkinen discloses the incorporation of *lactobacilli* into Swiss and Edam cheeses in detail. See, i.e., Example 3 and 4.

It is the Examiner's position that knowing the details of anti-Helicobacter properties of *Lactobacillus gasseri* OLL 2176 and possibility of imbedding it in a food matrix such as cheese, it would have been obvious, at the time the invention was made, to propose making a cheese containing *Lactobacillus gasseri* OLL 2176, by one of ordinary skill in the art, for its anti-Helicobacter properties.

Applicants respectfully traverse the rejection.

First of all, the object of the present application is inhibition of *H. pylori* in human stomach, therefore, high survival bacterial count of *L. gasseri* is maintained in cheese for a long time.

In contrast, Mäyrä-Mäkinen discloses the use of *L. rhamnosus* in cheese for inhibition of proliferation of clostridia. Col. 1, lines 8-10. The object of Mäyrä-Mäkinen is inhibition of toxic bacteria in cheese, therefore, it is necessary that *L. rhamnosus* coexist in cheese.

The motivation to modify the reference must be found in the references themselves or in the knowledge generally available to a person of ordinary skill in the art. See MPEP § 2143.01.

Furthermore, Claim 1, as amended, recites that the lactic acid bacterium is present at a viable count of  $10^7$  cfu/g or more when preserved at a temperature of 10°C or less for 6 months.

Neither of Kimura nor Mäyrä-Mäkinen, alone or in combination, discloses or teaches the recitation of a natural cheese comprising a lactic acid bacterium, wherein the lactic acid

bacterium is present at a viable count of  $10^7$  cfu/g or more when preserved at a temperature of  $10^{\circ}\text{C}$  or less for 6 months.

In more detail, as the Examiner correctly pointed out, the primary reference Kimura does not disclose the use of *Lactobacillus gasseri* in nature cheese. In contrast, Kimura discloses the use of *Lactobacillus gasseri* with a disinfection property against *Helicobacter pylori* in a food or drink product, such as fermented milk. [001] and [0008].

Applicants respectfully submit that the instant application discloses, at page 3, first paragraph, that fermented milk has a relatively short quality preservation period of about 2 weeks due to food properties of fermented milk. After 2 weeks preservation, the bacterial count decreases to almost half the level before preservation.

Kimura clearly fails to disclose the recitation of a natural cheese comprising a lactic acid bacterium, wherein the lactic acid bacterium is present at a viable count of  $10^7$  cfu/g or more when preserved at a temperature of  $10^{\circ}\text{C}$  or less for 6 months.

Mäyrä-Mäkinen does not make up the deficiency of Kimura.

Accordingly, Claim 1, and all dependent claims that directly or indirectly depends from Claim 1, are patentable over Kimura in view of Mäyrä-Mäkinen.

In view of the above, Applicants request reconsideration and withdrawal of the present §103 rejection of Claims 1-3 and 5-10.

## **II. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

AMENDMENT UNDER 37 C.F.R. § 1.111

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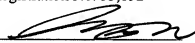
Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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